

NOTE

LECTOTYPIFICATION OF THE NAME *GENTIANA*
QUINQUEFOLIA VAR. *OCCIDENTALIS* (GENTIANACEAE)

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Gentiana quinquefolia [“*quinqueflora*”] var. *occidentalis* A. Gray is the basionym of the currently used name *Gentianella quinquefolia* subsp. *occidentalis* (A. Gray) J.M. Gillett. Gillett (1957, 1963) considered this name to have been based on plate 3496 in *Curtis’s Botanical Magazine* and the accompanying description of *Gentiana quinqueflora* [sic] by Robert Graham (Hooker 1836). However, when Gray (1848) published the name in the first edition of his *Manual*, he did not mention that plate or description. He first equated the representation of *G. quinqueflora* in the *Botanical Magazine* with his var. *occidentalis* in the *Synoptical Flora* (1878). Even then, the plate was equated “mainly” with var. *occidentalis*. There was no indication that this plate and description had been the basis of the description published by Gray 30 years earlier.

According to Hooker (1836), the plate was prepared from a drawing sent to him by Charles Wilkins Short of Lexington, Kentucky. Short’s specimens of this species, cited below, represent subsp. *occidentalis*. The accompanying description by Graham was based largely or entirely on plants raised, presumably by or on behalf of Graham, from seeds sent to England from New York and from herbarium specimens collected by Heinrich Karl Beyrich at the Peaks of Otter in the Blue Ridge Mountains of Virginia. The supplementary illustrations, showing floral details, were drawn from the cultivated plants. The only subspecies occurring either in New York or in Virginia is subsp. *quinquefolia*.

At NY, two collections mounted on one sheet, *ex herb.* John Torrey, have been designated possible types of the name *Gentiana quinquefolia* var. *occidentalis* A. Gray. The plant on the left, collected by William Cullen Bryant at Cummington, Massachusetts, represents subsp. *quinquefolia* and was so annotated by John M. Gillett. Its provenance precludes its being of nomenclatural significance in the present context. The stems in the center and right, collected by John Leonard Riddell at

Worthington, Ohio, represent subsp. *occidentalis* and were so annotated by Gillett. They may have been seen by Gray prior to 1848, but they were neither annotated by him nor mentioned in any of his publications. At os, a specimen of subsp. *occidentalis ex herb.* John M. Coulter, collected at New Albany, Indiana, by Asahel Clapp in 1837 has been considered a type, but no specimen collected by Clapp was cited by Gray and there is no evidence that he saw any replicate of that collection.

To eliminate uncertainty as to the correct application of the epithet *occidentalis*, it is appropriate to designate as lectotype a specimen that was in Gray's possession when he wrote the first edition of his *Manual* and was identified as var. *occidentalis* by him. Such a specimen is among those from Gray's own herbarium now at GH. It was collected by Short in Kentucky and bears Gray's label with the printed designation of its distribution as "Western States," corresponding to the range of the taxon as given in the *Manual*. Although the wording in the *Manual*, "through the Western States," implies that Gray had already seen more than one specimen of this taxon, no other specimen from Gray's herbarium bears such a label. The designation of this specimen as the lectotype maintains the use of the epithet *occidentalis* in its established sense.

Gentianella quinquefolia subsp. *occidentalis* (A. Gray) J.M. Gillett, Ann. Missouri Bot. Gard. 44: 245. 1957; *Gentiana quinquefolia* ["*quinqueflora*"] var. *occidentalis* A. Gray, Manual, ed. 1, 359. 1848, basionym. *Gentianella quinquefolia* var. *occidentalis* (A. Gray) Small, Fl. S.E. U.S., ed. 1, 929. 1903; *Amarella occidentalis* (A. Gray) Greene, Leaflet Bot. Observ. Crit. 1: 53. 1904; *Aloitis occidentalis* (A. Gray) Greene, Leaflet Bot. Observ. Crit. 1: 94. 1904; *Gentiana occidentalis* (A. Gray) T.J. Fitzp., Iowa Naturalist 2: 13. 1906, non Jakow. 1899; *Gentianella occidentalis* (A. Gray) Small, Man. S.E. Fl. 1052. 1933; *Aloitis quinquefolia* subsp. *occidentalis* (A. Gray) Á. Löve & D. Löve, Taxon 34: 164. 1985. LECTOTYPE here designated: U.S.A. Kentucky: Barrens [not more precisely located], C.W. Short s.n., s.d. (LECTOTYPE: GH!; ISOLECTOTYPE: K!).

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LITERATURE CITED

- GILLETT, J. M. 1957. A revision of the North American species of *Gentianella* Moench. Ann. Missouri Bot. Gard. 44: 195–269.
- . 1963. The Gentians of Canada, Alaska, and Greenland. Publ. 1180, Research Branch, Canada Dept. Agric., Ottawa, ON, Canada.
- GRAY, A. 1848. A Manual of the Botany of the Northern United States, from New England to Wisconsin and South to Ohio and Pennsylvania Inclusive . . . James Munroe & Co., Boston, MA.
- . 1878. Synoptical Flora of North America, Vol. 2, Part 1. Gamopetalae after Compositae. Ivison, Blakeman, Taylor, and Company, New York.
- HOOKE, W. J. 1836. *Gentiana quinqueflora*: Five-flowered Gentian. Bot. Mag. 63: t. 3496 + 2 unnumbered pp. [includes description by R. Graham]